

20030929.qrp v03_n058.qrl.20030929

Date: Mon, 29 Sep 2003 19:03:13 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 3058

QRP-L Digest 3058

Topics covered in this issue include:

- 1) [158482] FO/DL3GA ...GOT EM !!!
by "George Osier" <gosier@twcny.rr.com>
- 2) [158483] What is QRP?
by Karl Larsen <k5di@zianet.com>
- 3) [158484] Re: West Florida QRP
by G Brandon Hoyt <preacher102677@juno.com>
- 4) [158485] Re: MQFD Washout !
by Tom Severt <n2uhc@yahoo.com>
- 5) [158486] FS Antenna Tuners, Heath Freq Counter
by Jim Janack <n2jj@ix.netcom.com>
- 6) [158487] Re name amateur radio?
by Joel M Denison <hamjoel@juno.com>
- 7) [158488] Re: OT: 32kHz Xtal oscillators ckts?
by Brad Thompson <Brad.Thompson@valley.net>
- 8) [158489] New mailing list for BPL discussion
by Bill Owens N2RKL <bill@owensfamily.org>
- 9) [158490] OT: checking EST of capacitors
by David Beach <VE3STI@rac.ca>
- 10) [158491] Re: What is QRP
by "John Sielke" <jsielke@pobox.com>
- 11) [158492] Re: name amateur radio?
by David Toepfer <davetoepfer@yahoo.com>
- 12) [158493] Re: What is QRP
by Peter Burbank <peterlee@qx.net>
- 13) [158494] MQFD Non-event...
by "sslyon" <sslyon@megalink.net>
- 14) [158495] Re: New mailing list for BPL discussion
by "Paul Valko - W8KC" <w8kc@comcast.net>
- 15) [158496] QRPacificon Registration Kit Announced
by "Doug Hendricks" <ki6ds@dospalos.org>
- 16) [158497] Re: New mailing list for BPL discussion
by "n3drk" <n3drk@triad.rr.com>
- 17) [158498] Re: OT: checking EST of capacitors
by "Leon Heller" <leon_heller@hotmail.com>
- 18) [158499] K8FF FingerDimple
by WAYNE SMITH <k8ff@juno.com>
- 19) [158500] Re: checking EST of capacitors

- by "Nick Kennedy" <nkennedy@tcainternet.com>
- 20) [158501] Re: New mailing list for BPL discussion
by "Mark Rauchfuss" <mark.rauchfuss@worldnet.att.net>
- 21) [158502] Re: checking ESR of capacitors
by "Nick Kennedy" <nkennedy@tcainternet.com>
- 22) [158503] Re: What is QRP
by Thom LaCosta <baltimoremd@baltimoremd.com>
- 23) [158504] Re: checking ESR of capacitors
by Garey Barrell <k4oah@mindspring.com>
- 24) [158505] RE: checking ESR of capacitors
by "Sverre Holm" <la3za@qsl.net>
- 25) [158506] The "Pittsburg" style
by "Bruce Kizerian" <kizerian@xmission.com>
- 26) [158507] Re: What is QRP
by "Bill Rowlett" <kc4atu@hotmail.com>
- 27) [158508] Re: What is QRP
by Thom LaCosta <baltimoremd@baltimoremd.com>
- 28) [158509] Adjustable baluns?
by ARDUJENSKI@aol.com
- 29) [158510] Re: checking ESR of capacitors
by Garey Barrell <k4oah@mindspring.com>
- 30) [158511] Re: What is QRP
by w9ya <w9ya@arrl.net>
- 31) [158512] Re: What is QRP
by "John Sielke" <jsielke@pobox.com>
- 32) [158513] UV Resistant Heat Shrink?
by Steve.Lawrence@ITWFEG.COM
- 33) [158514] Re: Adjustable baluns?
by "George, W5YR" <w5yr@att.net>
- 34) [158515] Re: Adjustable baluns?
by "Bill Acito W1PA" <w1pa@hotmail.com>
- 35) [158516] Re: Adjustable baluns? [use a tuner]
by Chuck Carpenter <w5usj@9plus.net>
- 36) [158517] Re: Adjustable baluns?
by Brad Thompson <Brad.Thompson@VALLEY.NET>

Date: Sun, 28 Sep 2003 18:48:01 -0400
From: "George Osier" <gosier@twcnny.rr.com>
To: "QRP-L" <qrp-l@lehigh.edu>
Subject: [158482] F0/DL3GA ...GOT EM !!!
Message-ID: <001101c38612\$922f1bc0\$74883a18@twcnny.rr.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi All !!!

Just worked FO/DL3GA on 10 meters !!!!
5 watts from the C22 !!!!!

73s

George , N2JNZ

Date: Sun, 28 Sep 2003 17:02:12 -0600 (MDT)
From: Karl Larsen <k5di@zianet.com>
To: qrp-l@lehigh.edu
Subject: [158483] What is QRP?
Message-ID: <Pine.LNX.4.44.0309281652550.4681-100000@bucket.dog>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have not entered much to this list of late but decided it is time to ask, when are we getting back to qrp? I am really tired of people echoing other people on the BPL issue. I have done all I can including writing an email to the FCC chairman. Let's drop it!

On Oct 8 2003 I and wf5a will leave for a backpack into the Gila Wilderness of New Mexico. We will be at 9,000 feet elevation and have a dipole cut to 40 meters and can be rolled up so it is on 10 meters if that is open. The rig is a Yaesu FT-817 on internal battery and will run about 2 watts.

I ordered a new sleeping bag for this trip. My old one is falling apart but that doesn't matter much in the summer. But in October it gets below freezing in the morning so you sleep late. And carry a good mummy sleeping bag.

--

- Karl Larsen k5di Las Cruces,NM Az ScQRPions -

Date: Tue, 28 Oct 2003 19:11:07 -0500
From: G Brandon Hoyt <preacher102677@juno.com>
To: qrp-l@Lehigh.EDU
Subject: [158484] Re: West Florida QRP
Message-ID: <20031028.191107.2060.0.preacher102677@juno.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I'm UP!!

Especially if it could be moved toward the Orlando area, hey nothing against Tampa, just a two hour drive...

I'll bring donuts if there's a krispy kreme nearby!!

> At 09:15 PM 9/27/2003 -0400, Paul Womble wrote:
> >Ok folks in Florida...here's your chance. There has been some talk
> of
> >resurrecting the West Florida QRP get togethers. In the past
> meetings
> >were held in Tampa...but there is nothing to say that meetings
> could not
> >be moved around the area.
> >
> >Please let me know if there is any interest...and we'll make it
> happen!
> >
> >
> >What will happen at a meeting? Meet, show off goodies, get some
> help
> >with projects, and swap tall tales. Also getting together for some
> of
> >the QRP operating events.
> >
> >No agenda, no dues, no club politics, turf battles, or repeater
> groups
> >trying to raise money. Just lots of fun!
> >
> >What say?
> >
> >Paul K4FB
>

LIC,

G. Brandon Hoyt --"Known far and Wide as The Great Pumpkin"
Philosopher, Photographer, Preacher, Pirate, Poet
DE KG4GVL Clear

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Surf the web up to FIVE TIMES FASTER!
Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sun, 28 Sep 2003 16:34:50 -0700 (PDT)
From: Tom Sevalt <n2uhc@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [158485] Re: MQFD Washout !
Message-ID: <20030928233450.83929.qmail@web9605.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

--- Rick McKee <kc8aon@juno.com> wrote:
> Anyone having any luck with MQFD ?

I had a nice little operating session this weekend. I didn't operate a great deal since I was camped out with family, but did manage to get a few contacts in. The weather was perfect if though a little on the cool side. Friday night I thought it was going to storm, but the storms moved around us and didn't bother us. I took my 20 and 40 meter QRP rigs and my 2 band dipole and set them up in a state park in NE Oklahoma.

I did notice a lot of RTTY and figured there was a contest going on. There were several other CW contests going on as well, so sometimes it was hard to find people who just wanted to QSO. However, it was great just being away from home and playing radio.

=====
Tom Sevalt N2UHC
<http://www.geocities.com/n2uhc>

Do you Yahoo!?
The New Yahoo! Shopping - with improved product search
<http://shopping.yahoo.com>

Date: Sun, 28 Sep 2003 20:20:49 -0400 (GMT-04:00)
From: Jim Janack <n2jj@ix.netcom.com>
To: qrp-1@lehigh.edu
Subject: [158486] FS Antenna Tuners, Heath Freq Counter
Message-ID: <15562522.1064794849464.JavaMail.root@misspiggy.psp.pas.earthlink.net>
Mime-Version: 1.0

Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>From my dad's (WA2DWU) shack. My elmer became SK in Feb.

Tuners:

MFJ 941-D \$50

MFJ 941-E \$75

Dentron 160-10AT/1KW Super Tuner \$80

Counter:

Heathkit IM-2420 \$50

Plus shipping and all with manuals.

72/73,
Jim N2JJ

Date: Sun, 28 Sep 2003 19:22:13 -0400
From: Joel M Denison <hamjoel@juno.com>
To: fpqrp-1@mpna.com, qrp-1@Lehigh.EDU
Subject: [158487] Re name amateur radio?
Message-ID: <20030928.204729.-255843.0.hamjoel@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi, I saw a couple of posts on this topic so I got a dictionary and looked up the words amateur and radio....

I think amateur radio is perfectly named... true there are some in the amateur ranks who are professionals in one or more aspects of radio, however, for the most part we are amateur radio ops...

look at all the kits available today.... truly the word amateur does not mean, ignorant or uneducated... look up the words and I think u will find we are aptly named...

As for the word ham, the amateur probably earned that from operating habits as commented on by others....

Truly, Amateur Radio is an accurate and noble name for who we are and what we do..

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Date: Sun, 28 Sep 2003 21:06:44 -0400
From: Brad Thompson <Brad.Thompson@valley.net>
To: ianmwilson@earthlink.net,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [158488] Re: OT: 32kHz Xtal oscillators ckts?
Message-ID: <5.0.2.1.2.20030928210152.01b43860@pop3.norton.antivirus>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello--

I can't locate the schematic at the moment, but I built an 81.92 KHz oscillator using two discrete bipolar transistors-- one as a grounded-base amplifier to drive the crystal with a high impedance, and one emitter follower to present a high impedance to the crystal, with capacitor feedback between the emitter follower and the ground-base stages. Both amplifiers used linear bias.

Low-frequency crystals present a high impedance at resonance, and devices with lots of broadband gain may try to "take off" at parasitic frequencies.

73--
Brad AA1IP

Date: Sun, 28 Sep 2003 21:29:25 -0400
From: Bill Owens N2RKL <bill@owensfamily.org>
To: qrp-l@lehigh.edu
Subject: [158489] New mailing list for BPL discussion
Message-ID: <20030929012925.GG427@owensfamily.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Disposition: inline

In order to create a place where those of us interested in Broadband over Power Lines can discuss it in detail, without annoying members of other lists, I've created a new Yahoo mailing list called ham-bpl. The list info is as follows:

Post message: ham-bpl@yahoogroups.com
Subscribe: ham-bpl-subscribe@yahoogroups.com
Unsubscribe: ham-bpl-unsubscribe@yahoogroups.com
List owner: ham-bpl-owner@yahoogroups.com

It is set to restrict posting to list members only, with subscriptions and initial posts moderated, only to prevent spam.

Personally I am very concerned about BPL and opposed to its deployment in its current state, but am trying to keep an open mind while looking for solutions. Other viewpoints are welcome; however, I do intend for this to be a discussion list, not a name-calling contest, and will enforce that. If you want name-calling, I can suggest a number of other lists ;)

Bill N2RKL

Date: Sun, 28 Sep 2003 21:36:19 -0400
From: David Beach <VE3STI@rac.ca>
To: <qrp-l@lehigh.edu>
Subject: [158490] OT: checking EST of capacitors
Message-ID: <BB9D04D3.249%VE3STI@rac.ca>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

W4JBM wrote a good article about testing capacitor ESR in the September QST. His 'test adapter' needs a signal generator to supply a 50-100KHz sine wave at about 1V or so into an impedance of about 1K ohm. I don't happen to have such a source on my bench. Having both the signal source and the testing resistors in the same compact box would be convenient, anyway.

I think that a simple multivibrator producing a square wave might *not* likely do the trick - the calculations/theory are based on a sine wave.

So, clever readers of this list, any web links to simple circuits (hopefully using a handful of cheap garden-variety parts - not some hard-to-get exotic stuff) that could supply such a sine wave signal? I don't want to re-invent the wheel.

Or, am I wrong and could a simple square wave multivibrator - maybe with some filtering - do the trick?

Thanks for your thoughts. And, if you haven't seen the article, it is worth reading!

David Beach

VE3STI

Date: Sun, 28 Sep 2003 22:09:36 -0400
From: "John Sielke" <jsielke@pobox.com>
To: qrp-1@lehigh.edu
Subject: [158491] Re: What is QRP
Message-ID: <3F775C20.11083.2287E48@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

Interesting logic. A discussion of BPL, which possibly could completely change the way we do QRP, and Amateur radio is considered off topic, but we are blessed with the news of a new sleeping bag.

I just can't figure it.

John W2AGN

Date: Sun, 28 Sep 2003 20:01:01 -0700 (PDT)
From: David Toepfer <davetoepfer@yahoo.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [158492] Re: name amateur radio?
Message-ID: <20030929030101.41299.qmail@web12802.mail.yahoo.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

I agree completely. It is implicit in the definition of being an "amateur" at anything and consistent with the Part 97 definition of the Amateur Radio Service (... "no pecuniary interest" ...). If you don't make money at it you are an "amatuer". And it's nothing to be ashamed of.

dt

.

--- Joel M Denison <hamjoel@juno.com> wrote:
> Hi, I saw a couple of posts on this topic so I got a dictionary and
> looked up the words amateur and radio....
> I think amateur radio is perfectly named... true there are some in

> the amateur ranks who are professionals in one or more aspects of radio,
> however , for the most part we are amateur radio ops...
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> not mean, ignorant or uneducated... look up the words and I think u will
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> -----
> The best thing to hit the internet in years - Juno SpeedBand!
> Surf the web up to FIVE TIMES FASTER!
> Only \$14.95/ month - visit www.juno.com to sign up today!

Date: Sun, 28 Sep 2003 23:26:48 -0400
From: Peter Burbank <peterlee@qx.net>
To: jsielke@pobox.com,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [158493] Re: What is QRP
Message-ID: <5.2.0.9.0.20030928232252.00a17480@mail.qx.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 10:09 PM 9/28/2003, John Sielke wrote:
>Interesting logic. A discussion of BPL, which possibly could completely
>change the way we do QRP, and Amateur radio is considered off topic, but we
>are blessed with the news of a new sleeping bag.
>
>
>I just can't figure it.
>
>John W2AGN

I could not get the drift of the logic either John. I just figgered that
Karl was worried about
them ol' Gila Monsters snugglin' up in his new bag. :-) :-)
Pete NV4V

Date: Sun, 28 Sep 2003 23:36:54 -0400
From: "sslyon" <sslyon@megalink.net>

To: "qrp list" <qrp-l@lehigh.edu>
Subject: [158494] MQFD Non-event...
Message-ID: <001501c3863a\$edd9b980\$41c7e742@megalink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Leisurely poked around on 20m & 30m on rainy Saturday nite 'til 1:00AM, mainly because of the strange propagation. I've seldom had the free time to do that but sprouted something that's making me kick back a bit. Went back up to the tent and started about 9:30PM (Eastern) on 20m and noted that the band was really punky but careful scanning or persistent CQ's would yield some nice Q's at nice distance. Had to be fairly quick with some or QSB would kill the QSO. No geographic location stayed open for long except longitude ones. Never did get to 40m.

Net result was about 28 Q's split evenly on 20 & 30m, for example, HK3WPC, LZ1XL, RA1QJ, HB9BQR, VA7VV, XE3U, and 'local' folks like K7FD (OR), N5FH (LA) and N7MFB (WA). Not all of those guys were QRP, but hey... no rules, right? Due to Sunday lightning predictions I moved the gear out of the tent. So... event or not, I enjoyed some rewarding hamming and saw some interesting flying critters in the l.e.d. light as well.

73
seab
aa1my

Date: Mon, 29 Sep 2003 00:45:54 -0400
From: "Paul Valko - W8KC" <w8kc@comcast.net>
To: <bill@owensfamily.org>
Cc: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [158495] Re: New mailing list for BPL discussion
Message-ID: <001d01c38644\$91471a00\$6501a8c0@hamshack1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

----- Original Message -----
From: "Bill Owens N2RKL" <bill@owensfamily.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

> In order to create a place where those of us interested in Broadband
> over Power Lines can discuss it in detail, without annoying members of
> other lists, I've created a new Yahoo mailing list called ham-bpl. The

> list info is as follows:

Too Late!!! See <http://groups.yahoo.com/group/BPLandHamRadio/>

Already has 44 members.

There are 30-something BPL Yahoo groups, though most of them have nothing to do with Ham Radio :-)

Hmmmmmm, as my favorite rock group 'Barenaked Ladies' (interestingly also known as B N L !!!) says, "It's all been Done."

It's alllll beeen donnnnnnnne befooooooore.

73! =paul= W8KC

Collector of Ten*Tecs and other fine plastics.

Visit the Virtual Ten*Tec Museum at <http://mywebpages.comcast.net/w8kc>

Date: Sun, 28 Sep 2003 21:54:17 -0700
From: "Doug Hendricks" <ki6ds@dospalos.org>
To: "qrp-l" <qrp-l@lehigh.edu>
Cc: <wa6ger@amqrp.org>, <n2apb@amqrp.org>, <n2cx@amqrp.org>, <ak1p@amqrp.org>
Subject: [158496] QRPacificon Registration Kit Announced
Message-ID: <01ab01c38645\$bda44270\$1fdbd7a8@DOUG>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

This year's QRPacificon is being sponsored by the American QRP Club, and hosted by NorCal QRP Club. If you have attended in the past you will probably remember that we always have an operating activitiy on Friday night. This year is no different, and I have a brand new event planned for us.

But first, a little back round. Chuck Olson, of Jackson Harbor Press, who does the programming for the NorCal keyer came up with a special version for Pacificon. I asked him if he could do a chip that had variable sidetone frequency, and if we could boost the volume a little bit. Chuck said no problem, and very quickly came up with a special chip that lets the user pick the sidetone frequency that he wants. You will see why this is important in a moment. He also suggested that we use a simple 1 transistor amplifier circuit to increase the volume of the tiny speaker. Chuck programmed a prototype chip, I threw together a manhattan style board to add

the additional parts that would be needed, and I tried the circuit. It works great.

Joe Porter agreed to make the board for us Pittsburg style, since we only need about 150 of them, and it is a lot cheaper to do them that way than to have a board house make such a small number of boards. Everything is in place, and I am pleased to announce that our operating activity for Pacificon will be a one hour audio qso party, using the special QRPacificon NorCal Keyers. Here's the deal. We will be shipping out the special Pacificon Keyer Kits to the preregistered attendees so that they can build their Keyers and bring them along with a set of paddles to Pacificon. Friday night from 8 til 9 PM we will have a NorCal QSO party, right in the QRP Hospitality room using the keyer kits. The exchange will be name, age, and your city and state. Mine will be:

Doug 55 Dos Palos, CA

The fun will be hearing all of those keyers in one room at one time. Now you see why we have variable side tone frequency!! It should be a blast. We will have a prize for 1st, 2nd and 3rd place in the contest, with the number of QSO's determining the winners.

If you have not registered for Pacificon, you need to hurry. You can register two ways. First of all you can send a check or money order for \$10 to:

Jim Cates
Pacificon Registration
3241 Eastwood Rd.
Sacramento, CA 95821

Please enclose a self addressed mailing label.

Or:

Go to the AmQRP web page: www.amqrp.org and register using paypal. But hurry, Pacificon is fast approaching, and you need to get your kit built!!

Your special Pacificon keyer kit will be mailed to you. The \$10 registration fee will also get you an official AmQRP Club Pacificon 2003 name badge (produced as always by Jerry Parker, WA0OWR), and a copy of the Pacificon Speakers Compendium. Note that compendiums and badges must be picked up and will not be mailed.

Don't forget now, Friday night you will need a set of paddles and your special 2003 Pacificon Keyer kit for the QRPacificon Audio QSO Party. Hope to see you at Pacificon.

72, Doug

Date: Mon, 29 Sep 2003 01:14:16 -0400
From: "n3drk" <n3drk@triad.rr.com>
To: <w8kc@comcast.net>,
 "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [158497] Re: New mailing list for BPL discussion
Message-ID: <063601c38648\$87ab65b0\$6400a8c0@n3drk>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Everyone who posts about the current situation of BPL are not annoying the list members. This is a very serious issue which will determine the fate of All Ham Radio Operators. So no need to go elsewhere for the time being. Continue to post. We need your representation. In all due respect to the list moderator.
john-n3drk

----- Original Message -----
From: "Paul Valko - W8KC" <w8kc@comcast.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Monday, September 29, 2003 12:45 AM
Subject: Re: New mailing list for BPL discussion

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> From: "Bill Owens N2RKL" <bill@owensfamily.org>
> To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
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> do with Ham Radio :-)

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> Hmmmmmm, as my favorite rock group 'Barenaked Ladies' (interestingly also
> known as B N L !!!) says, "It's all been Done."
>
> It's alllll been donnnnnnnne befoooooore.
>
> 73! =paul= W8KC
> Collector of Ten*Tecs and other fine plastics.
> Visit the Virtual Ten*Tec Museum at <http://mywebpages.comcast.net/w8kc>
>
>

Date: Mon, 29 Sep 2003 07:54:06 +0000
From: "Leon Heller" <leon_heller@hotmail.com>
To: VE3STI@rac.ca, qrp-1@Lehigh.EDU
Subject: [158498] Re: OT: checking EST of capacitors
Message-ID: <Law15-F50z0VcWE8Md70004894b@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

>From: David Beach <VE3STI@rac.ca>
>Reply-To: VE3STI@rac.ca
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: OT: checking EST of capacitors
>Date: Sun, 28 Sep 2003 21:36:19 -0400
>
>W4JBM wrote a good article about testing capacitor ESR in the September
>QST.
>His 'test adapter' needs a signal generator to supply a 50-100KHz sine wave
>at about 1V or so into an impedance of about 1K ohm. I don't happen to have
>such a source on my bench. Having both the signal source and the testing
>resistors in the same compact box would be convenient, anyway.
>
>I think that a simple multivibrator producing a square wave might *not*
>likely do the trick - the calculations/theory are based on a sine wave.
>
>So, clever readers of this list, any web links to simple circuits
>(hopefully
>using a handful of cheap garden-variety parts - not some hard-to-get exotic
>stuff) that could supply such a sine wave signal? I don't want to re-invent
>the wheel.
>
>Or, am I wrong and could a simple square wave multivibrator - maybe with

>some filtering - do the trick?
>

How about a simple twin-T oscillator, it can produce a nice sine wave. It'll need a buffer, as they like to output into a high impedance. There is one in the Handbook.

73, Leon

--

Leon Heller, G1HSM Tel: +44 1424 423947

Email:leon_heller@hotmail.com

My web page: http://www.geocities.com/leon_heller

Sign-up for a FREE BT Broadband connection today!
<http://www.msn.co.uk/specials/btbroadband>

Date: Mon, 29 Sep 2003 07:55:00 -0400
From: WAYNE SMITH <k8ff@juno.com>
To: qrp-1@lehigh.edu
Subject: [158499] K8FF FingerDimple
Message-ID: <20030929.075605.1932.3.K8FF@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

FingerDimple. What the heck is that? It's the solution you have been waiting for to make those ordinary tuning knobs into spinner knobs.

K8FF introduces another new product to make operating more enjoyable. Rapid QSY is easy by adding a self-adhesive FingerDimple to any suitable tuning knob.

For details and purchasing information visit WWW.FingerDimple.com

If you are attending Pacificon, see Doug hendricks KI6DS at the NorCal booth. He has generously offered to have FingerDimples for sale at this major event.

Wayne K8FF

Date: Mon, 29 Sep 2003 07:21:50 -0700
From: "Nick Kennedy" <nkennedy@tcainternet.com>

To: <VE3STI@rac.ca>,
"Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [158500] Re: checking EST of capacitors
Message-ID: <003d01c38695\$05eb4660\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I really liked the article too. Anybody with a bunch of boatanchors and/or shoebox full of funky old electrolytics would see the usefulness of this simple circuit.

Like you, I think a sine wave would be pretty desirable, because your considering the capacitor's reactance at a certain frequency and the square wave contains harmonics. Your idea of a multivibrator with sufficient LP filtering might be a good one though. You'd probably have to switch filters a time or two to get the wide range you want.

Another thought would be to use your sound card and one of the many audio analysis tools available on the web to generate audio with it.

I recently burned a bunch of time fooling with Wein bridge oscillators; one with FET and another with lamp AGC, but they violate your need for simplicity and also aren't easy to make wide range.

My nice vacuum tube Heathkit audio oscillator is a twin-T with lamp controlled AGC, but it takes a lot of switching to achieve its wide range.

I thought the original circuit could be made more accessible to all and easier to use by adding a diode detector for those who don't have oscilloscopes, even if an op-amp was needed to first boost the signal to diode detection levels.

Let us know how it works out.

72--Nick, WA5BDU

----- Original Message -----

From: "David Beach" <VE3STI@rac.ca>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Sunday, September 28, 2003 6:36 PM
Subject: OT: checking EST of capacitors

> W4JBM wrote a good article about testing capacitor ESR in the September QST.

> His 'test adapter' needs a signal generator to supply a 50-100KHz sine wave
> at about 1V or so into an impedance of about 1K ohm. I don't happen to have
> such a source on my bench. Having both the signal source and the testing
> resistors in the same compact box would be convenient, anyway.

Date: Mon, 29 Sep 2003 08:47:52 -0400
From: "Mark Rauchfuss" <mark.rauchfuss@worldnet.att.net>
To: <bill@owensfamily.org>,
 "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [158501] Re: New mailing list for BPL discussion
Message-ID: <000701c38687\$e95562e0\$8439570c@oemcomputer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Thanks Bill. This was a smart move, especially since this is a subject which requires the attention of every one of us and one that will not be constructively resolved without our individual attention and involvement.

73s for now,

Mark,
KD7WEO

----- Original Message -----

From: "Bill Owens N2RKL" <bill@owensfamily.org>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Sent: Sunday, September 28, 2003 9:29 PM
Subject: New mailing list for BPL discussion

> In order to create a place where those of us interested in Broadband
> over Power Lines can discuss it in detail, without annoying members of
> other lists, I've created a new Yahoo mailing list called ham-bpl. The
> list info is as follows:
>
> Post message: ham-bpl@yahoogroups.com
> Subscribe: ham-bpl-subscribe@yahoogroups.com
> Unsubscribe: ham-bpl-unsubscribe@yahoogroups.com
> List owner: ham-bpl-owner@yahoogroups.com
>
> It is set to restrict posting to list members only, with subscriptions

> and initial posts moderated, only to prevent spam.
>
> Personally I am very concerned about BPL and opposed to its deployment in
> its current state, but am trying to keep an open mind while looking for
> solutions. Other viewpoints are welcome; however, I do intend for this
> to be a discussion list, not a name-calling contest, and will enforce
> that. If you want name-calling, I can suggest a number of other lists ;)
>
> Bill N2RKL
>

Date: Mon, 29 Sep 2003 07:58:05 -0700
From: "Nick Kennedy" <nkennedy@tcainternet.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [158502] Re: checking ESR of capacitors
Message-ID: <004901c3869a\$16a56710\$0400000a@wa5bdu>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I forgot to mention one other potential wide range audio oscillator. How about using one of these DDS units, like the NJQRP or the Trevor Jacobs kits out there?

You might have to take the output from an alternate point, if exisiting blocking caps are too small to pass audio. But I suspect the number of samples per cycle with such high speed units would build a pretty nice sine wave with probably no filtering required, or very simple filtering at most.

72--Nick, WA5BDU

Date: Mon, 29 Sep 2003 09:11:56 -0400 (EDT)
From: Thom LaCosta <baltimoremd@baltimoremd.com>
To: John Sielke <jsielke@pobox.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [158503] Re: What is QRP
Message-ID: <20030929085756.S64297-100000@unix1.vhost.min.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sun, 28 Sep 2003, John Sielke wrote:

> Interesting logic. A discussion of BPL, which possibly could completely
> change the way we do QRP, and Amateur radio is considered off topic, but we
> are blessed with the news of a new sleeping bag.

The attitude of dismissing discussions of BPL is truly mysterious.
Elecraft, who has a huge stake in QRP, even frowns on BPL discussions
in their list.

If we, and other HF users don't devote a lot of time, energy and funds
in combatting BPL, a large number of amateur related lists and web sites
will turn into "Do you remember when?" repositories.

What's even more depressing is that when alternative venues are offered to
discuss QRP without moderation, BPL and other matters that affect us,
participation is virtually zero.

But, once we can't communicate via QRP, or even QRO, I'm sure the
mailing lists will be very active. WHO knows, maybe someone will start
one that actually makes discussions on on-air operations Off Topic.

Thom

baltimoremd@baltimoremd.com
<http://www.baltimoremd.com/>
<http://www.baltimorehon.com/>
<http://www.zerobeat.net>
<http://www.tlchost.net>

Thom LaCosta K3HRN Webmaster
Baltimore's Home Page
Home of the Baltimore Lexicon
Home of The QRP Web Ring and DrakeList
Web Hosting as low as \$3.49/month

Date: Mon, 29 Sep 2003 09:35:55 -0400
From: Garey Barrell <k4oah@mindspring.com>
To: nkennedy@tcainternet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [158504] Re: checking ESR of capacitors
Message-ID: <3F78353B.1020306@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Before you get too far down the road with this mouse
designed by a committee, (also known as an elephant!,) you

might want to take a look at

<<http://www.fullnet.com/u/tomg/esrscope.htm><http://www.fullnet.com/u/tomg/esrscope.htm>>

for a description of this system only one generation removed from the original author.

For example a suitable source is a 555 timer...

You might also want to take a look at

<http://www.anatekcorp.com/testequipment/esrtext.htm>

for a description of the ESR problem.

And if you do much of this type of work, you might also want to look at

<http://www.anatekcorp.com/testequipment/esr.htm>

for a nice little unit that does this "automatically" and also serves as a very useful "low Ohms" meter (0.01 to 99 ohms in three ranges) good for finding the one shorted bypass on a power buss or a shorted PC trace.

73, Garey - K40AH
Atlanta

Nick Kennedy wrote:

> I forgot to mention one other potential wide range audio oscillator. How
> about using one of these DDS units, like the NJQRP or the Trevor Jacobs kits
> out there?

>

> You might have to take the output from an alternate point, if existing
> blocking caps are too small to pass audio. But I suspect the number of
> samples per cycle with such high speed units would build a pretty nice sine
> wave with probably no filtering required, or very simple filtering at most.

>

> 72--Nick, WA5BDU

>

>

>

Date: Mon, 29 Sep 2003 16:33:25 +0200
From: "Sverre Holm" <la3za@qsl.net>
To: "'Low Power Amateur Radio Discussion'" <qrp-1@Lehigh.EDU>
Subject: [158505] RE: checking ESR of capacitors
Message-ID: <000301c38696\$a4c535b0\$8e00a8c0@Master>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="US-ASCII"
Content-Transfer-Encoding: 7bit

If you don't want to spend more than 99 cents on the ESR checker, then
look at <http://octopus.freeyellow.com/99.html>

I built it using my own external square-wave generator and got it even
cheaper ...

--
73,
Sverre

Sverre Holm, LA3ZA
www.qsl.net/la3za

Date: Mon, 29 Sep 2003 08:49:26 -0600
From: "Bruce Kizerian" <kizerian@xmission.com>
To: <qrp-1@lehigh.edu>
Subject: [158506] The "Pittsburg" style
Message-ID: <002e01c38698\$e1c5e660\$780746a6@98seoem>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I noticed some references in the Homebrewer regarding the "Pittsburg" style
of PCB boards. Are these boards etched or routed on an NC machine--seems
they could be made either way at a substantially reduced cost compared to
standard techniques. Even the etched boards would require much less time in
the "soup" and, therefore, a substantial savings in time and chemicals.

A couple of years ago I gave a demo of building a Manhattan style ElmerRadio
AM Regen radio at Weber State University in Ogden, Utah. They had a
commercial NC PCB milling machine there that made custom boards almost
identical in appearance to the Pittsburg style--not exactly like the RF

Sniffer, of course, but the pads and traces looked very similar.

I have a friend at work--a young college student who has trouble paying attention in class because he is smarter than most professors (in the all-important hands-on skills). He has converted an import milling machine to NC control from his laptop. He did all the design, and most of the machining of brackets, motor mounts, etc. He has agreed to make some test boards for me when everything is completely debugged.

Another engineering friend owns the MicroMill 2000 which is a Taig table top mini mill very professional converted to NC. You can see these at <http://www.microproto.com/micromill2000.htm> He has made a couple of dies for me for extruding polymer clay shapes. It is a great little machine and very capable of machining Pittsburg style boards. At \$2000 it is a bit pricy for hobbyists, but not so bad for clubs and small companies.

I'll let you know how things work out when I get some boards made this way.

Just thought you might find this interesting.

Bruce kk7zz

Date: Mon, 29 Sep 2003 16:43:54 +0000
From: "Bill Rowlett" <kc4atu@hotmail.com>
To: baltimoremd@baltimoremd.com, qrp-1@Lehigh.EDU
Subject: [158507] Re: What is QRP
Message-ID: <Law15-F526xfPTeip680000d031@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

A real technical discussion would be fine, what I believe Karl was refering to was the endless string of, I sent an email too post, and the copies of their emails.

Time to start working on the 430 transverters

73, Bill kc4atu

>From: Thom LaCosta <baltimoremd@baltimoremd.com>
>Reply-To: baltimoremd@baltimoremd.com
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Re: What is QRP

>Date: Mon, 29 Sep 2003 09:11:56 -0400 (EDT)
>
>On Sun, 28 Sep 2003, John Sielke wrote:
>
> > Interesting logic. A discussion of BPL, which possibly could completely
> > change the way we do QRP, and Amateur radio is considered off topic, but
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>Elecraft, who has a huge stake in QRP, even frowns on BPL discussions
>in their list.
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>
>But, once we can't communicate via QRP, or even QRO, I'm sure the
>mailing lists will be very active. WHO knows, maybe someone will start
>one that actually makes discussions on on-air operations Off Topic.
>
>
>Thom
>
>baltimoremd@baltimoremd.com Thom LaCosta K3HRN Webmaster
><http://www.baltimoremd.com/> Baltimore's Home Page
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><http://www.zerobeat.net> Home of The QRP Web Ring and
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><http://www.tlchost.net> Web Hosting as low as \$3.49/month
>
>

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Date: Mon, 29 Sep 2003 13:01:16 -0400 (EDT)
From: Thom LaCosta <baltimoremd@baltimoremd.com>
To: Bill Rowlett <kc4atu@hotmail.com>
Cc: qrp-1@Lehigh.EDU

Subject: [158508] Re: What is QRP
Message-ID: <20030929125432.C77464-100000@unix1.vhost.min.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 29 Sep 2003, Bill Rowlett wrote:

> A real technical discussion would be fine, what I believe Karl was refering
> to was the endless string of, I sent an email too post, and the copies of
> their emails.

Gee, I am always interested in comments made to the FCC and congress about issues that affect my operations as a ham. I have this terrible attitude....if we don't do as much as we can to stop BPL, then all the good technical discussions will be about what we used to do.

Of course the upside, for some, is that the number of posts concerning Fox Hunts, DX contests, QRP afield and any operational matters well be severely diminished, simply because no much of that will be going on.

I view the posts, or the endless string as you call it, as a means for one ham to share his/her concerns with others who will be adversely affected by BPL.

For me, Ham Radion and QRP is more than having technical discussions.

Thom

baltimoremd@baltimoremd.com	Thom LaCosta K3HRN Webmaster
http://www.baltimoremd.com/	Baltimore's Home Page
http://www.baltimorehon.com/	Home of the Baltimore Lexicon
http://www.zerobeat.net	Home of The QRP Web Ring and DrakeList
http://www.tlchost.net	Web Hosting as low as \$3.49/month

Date: Mon, 29 Sep 2003 13:24:27 EDT
From: ARDUJENSKI@aol.com
To: qrp-l@lehigh.edu
Subject: [158509] Adjustable baluns?
Message-ID: <37.3e90b18c.2ca9c4cb@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

When looking at field use of multiband antennas the impedance values can vary generally from 40 thru 2800 ohms. It would appear that using a fixed 6-to-1

or 4-to-1 standard balun introduces losses on some bands.

It would seem that if you could have a multi-tap balun or variable balun the losses might be minimized.

It would appear that going this route it would allow you to utilize close to a $1/2w_l$ on some bands which would make it very efficient with least amount of ground losses which typically can approach 50 percent in most cases.

Has anyone gone this route with any degree of success?

Alan KB7MBI in Woodinville, WA
FISTS 5702 / ARS / Proud member of ARRL
--- --- --- --- DIT DIT

Date: Mon, 29 Sep 2003 14:47:04 -0400
From: Garey Barrell <k4oah@mindspring.com>
To: qrp-1@lehigh.edu
Subject: [158510] Re: checking ESR of capacitors
Message-ID: <3F787E28.7050705@mindspring.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii; format=flowed
Content-Transfer-Encoding: 7bit

Apparently the first link in my message earlier "doubled"
for some reason. The correct link is

<<http://www.fullnet.com/u/tomg/esrscope.htm>>

73, Garey - K40AH
Atlanta

Date: Mon, 29 Sep 2003 14:19:17 -0500
From: w9ya <w9ya@arrl.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [158511] Re: What is QRP
Message-ID: <200309291419.17445.w9ya@arrl.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Content-Disposition: inline

But there really isn't much of that to begin with, although I did like the stuff about the sleeping bag.

Grin

Bob
w9ya

On Monday 29 September 2003 11:43 am, Bill Rowlett wrote:

> A real technical discussion would be fine, what I believe Karl was refering
> to was the endless string of, I sent an email too post, and the copies of
> their emails.

>

> Time to start working on the 430 transverters

>

> 73, Bill kc4atu

>

>

> From: Thom LaCosta <baltimoremd@baltimoremd.com>

>

> >Reply-To: baltimoremd@baltimoremd.com

> >To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

> >Subject: Re: What is QRP

> >Date: Mon, 29 Sep 2003 09:11:56 -0400 (EDT)

> >

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> >
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> >Thom
> >
> >baltimoremd@baltimoremd.com Thom LaCosta K3HRN Webmaster
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> >DrakeList
> ><http://www.tlchost.net> Web Hosting as low as \$3.49/month
>
>
> -----
> Get MSN 8 Dial-up Internet Service FREE for one month. Limited time
> offer-- sign up now! <http://join.msn.com/?page=dept/dialup>

Date: Mon, 29 Sep 2003 15:39:27 -0400
From: "John Sielke" <jsielke@pobox.com>
To: qrp-l@lehigh.edu
Subject: [158512] Re: What is QRP
Message-ID: <3F78522F.29976.5E9EE25@localhost>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT
Content-description: Mail message body

> Gee, I am always interested in comments made to the FCC and congress about
> issues that affect my operations as a ham. I have this terrible
> attitude....if we don't do as much as we can to stop BPL, then all the good
> technical discussions will be about what we used to do.

I agree, Tom. One thing the BPL discussion has done, however, is remove
attention from the Anti-CW petitions currently before the FCC. I trust
everyone has commented on those, also? (Not sure, this may be another banned
subject).

I fear a future when QRP Afield is done with 2KW SSB stations, powered by
generators, to get away from power lines. At least, we can still talk about
our new sleeping bags.

John W2AGN

Date: Mon, 29 Sep 2003 16:32:01 -0400
From: Steve.Lawrence@ITWFEG.COM
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [158513] UV Resistant Heat Shrink?
Message-ID: <0FED46B272.632E722E-0N85256DB0.007062A1-85256DB0.0070CB48@itwfeg.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

Thinking about using some heat shrinkable tubing during the construction of my next antenna project. I'm looking for a source of "outdoor resistant" heat shrink, that can endure years of UV exposure, winter ice, summer heat, flexing in the wind, etc... you get the picture.

Any recommendations out there? I would be specifically interested in recommendations backed by testing or certification indicating "good for years outdoors"!!

tia,
Steve
aa8af

Date: Mon, 29 Sep 2003 15:36:21 -0500
From: "George, W5YR" <w5yr@att.net>
To: <ARDUJENSKI@aol.com>,
"Low Power Amateur Radio Discussion" <qrp-1@lehigh.edu>
Subject: [158514] Re: Adjustable baluns?
Message-ID: <00c101c386c9\$59a85b60\$0401a8c0@PS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Alan, I fear that you are confusing a conventional transformer with the transmission line transformer, which is the definition of a balun.

Turns ratio in a conventional transformer determines impedance ratio which appears to be what you would like to do with your multi-band antenna system.

Unfortunately, baluns don't work that way.

Each "winding" on a balun is a short section of transmission line of a specified Z_0 . If it is a 1:1 balun designed for 50 ohms, then it will not function the same with 75 ohm coax. If it is a 4:1 designed for 50 ohm coax, then it will not function either properly as a balun or provide the 4:1 impedance transformation unless it is loaded with a 200 ohm resistive load.

The successful engineering approach to the job you describe is to rely upon a balun to do its intended job: control the flow of current such that little or no current flows on the outer braid of the coax. Then rely upon a tuner to accomplish the impedance transformation.

Multiband antennas present a wide range of generally complex input resistances and relying upon a simple balun to handle everything stands little chance of success.

Try to get hold of Jerry Sevick's book on baluns - I think that it contains the answers to many of your questions and does a much better job than I can do here in a few words.

Just remember: a balun is not a transformer. It is a *transmission line transformer*.

Hope this helps a little.

73/72, George

Amateur Radio W5YR - the Yellow Rose of Texas

Fairview, TX 30 mi NE of Dallas in Collin county EM13QE

"Starting the 58th year and it just keeps getting better!"

w5yr@att.net

----- Original Message -----

From: <ARДУJENSKI@aol.com>

To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>

Sent: Monday, September 29, 2003 12:24 PM

Subject: Adjustable baluns?

> When looking at field use of multiband antennas the impedance values can vary

> generally from 40 thru 2800 ohms. It would appear that using a fixed 6-to-1

> or 4-to-1 standard balun introduces losses on some bands.

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> Has anyone gone this route with any degree of success?
>
> Alan KB7MBI in Woodinville, WA
> FISTS 5702 / ARS / Proud member of ARRL
> --- --- --- --- DIT DIT

Date: Mon, 29 Sep 2003 17:00:39 -0400
From: "Bill Acito W1PA" <w1pa@hotmail.com>
To: <qrp-l@Lehigh.EDU>
Subject: [158515] Re: Adjustable baluns?
Message-ID: <BAY1-DAV7108FxhcMHY00008359@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

There are plans for one in the RSGB Wire Antennas book
(red cover, photo of a twisted length of grounding braid on the front).

I made/used one as a "match box" for my mobile verticals... I think
it had a 200 or 240 size core with a tap on every other turn mounted on
the back of a 12 position rotary switch. Simple, slick, and worked well.

Let me know if you want an image.

Bill
W1PA

Date: Mon, 29 Sep 2003 16:11:04 -0500
From: Chuck Carpenter <w5usj@9plus.net>
To: ARDUJENSKI@aol.com,
 "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [158516] Re: Adjustable baluns? [use a tuner]
Message-ID: <3.0.2.32.20030929161104.0069b22c@mail.9plus.net>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Alan,

You can consider a transmatch as your impedance transformer -- 50 Ohms in and a wide range of loads out. Then use either balanced feed line or coax and a ferrite bead current balun if you need to. The z-match tuners can do this quite nicely with either balanced or unbalance outputs. Measurements made using the Frank Witt, AI1H, methods show losses for the ZM-2 and others I've built of about .5 dB, just a few percent.

>When looking at field use of multiband antennas the impedance values can vary
>generally from 40 thru 2800 ohms. It would appear that using a fixed 6-to-1
>or 4-to-1 standard balun introduces losses on some bands.

Chuck Carpenter, W5USJ, Point, Rains Co., TX - EM22cv, NETXQRP #1
QRP-ARCI #5422, QRP-L #1306, QRPp-I #115, ARS #1280, SOC #57
Zombie #759, COG #11, 6 Club #201, FP #601 <http://www.netxqrp.org>

Date: Mon, 29 Sep 2003 16:52:44 -0400
From: Brad Thompson <Brad.Thompson@VALLEY.NET>
To: ARDUJENSKI@aol.com,
"Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [158517] Re: Adjustable baluns?
Message-ID: <5.0.2.1.2.20030929163948.022269e0@pop3.norton.antivirus>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

At 01:24 PM 09/29/2003 -0400, ARDUJENSKI@aol.com wrote:

>When looking at field use of multiband antennas the impedance values can vary
>generally from 40 thru 2800 ohms. It would appear that using a fixed 6-to-1
>or 4-to-1 standard balun introduces losses on some bands.

>

>It would seem that if you could have a multi-tap balun or variable balun the
>losses might be minimized.

>

>It would appear that going this route it would allow you to utilize close to
>a 1/2w1 on some bands which would make it very efficient with least amount of
>ground losses which typically can approach 50 percent in most cases.

>

>Has anyone gone this route with any degree of success?

Hello--

Well, sort of. An article which appeared in QST a year or two ago described the "Miracle Whip" (tm) antenna, in which the author dissected a power rheostat, removing the resistive element and substituting a toroidal core with insulation removed from the turns so that the wiper arm contacted one turn at a time. Think of a miniature Variac (tm) designed for RF, and you'll have the general idea. The author offers the "Miracle Whip" as a commercial product.

Technically, this device forms an adjustable "un-un", since the input is unbalanced and the output feeds a short whip antenna, which is very much an unbalanced load. One might be able to design a similar structure using two tapped windings on a single toroidal core, with two mechanically-ganged wipers and the balanced load connected to the ends of the windings. The whole works would get fed by a 1:1 balun to transform the unbalanced 50-ohm input to the balanced adjustable transformer.

73--

Brad AA1IP

End of QRP-L Digest 3058

